



# Safety Data Sheet

Version 7.0  
Revision Date: 16/09/2020

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: Deuterated Dimethyl terephthalate-2,3,5,6-d<sub>4</sub>  
Product abbreviation: D4DMT  
Product use: For laboratory research purposes.  
Supplier / Manufacturer: Polymer Source, Inc.  
Address: 124 Avro street, Dorval (Montreal), Quebec H9P 2X8, Canada  
Telephone: (+1) 514-421-5517  
Toll free: 1-866-422-9842  
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E-mail: [info@polymersource.com](mailto:info@polymersource.com)

## 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture: Not a hazardous substance or mixture.  
GHS Label elements, including precautionary statements: Not a hazardous substance or mixture.  
Hazards not otherwise classified (HNOC) or not covered by GHS: None

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Name: Dimethyl terephthalate-2,3,5,6-d<sub>4</sub>  
Formula: C<sub>10</sub>H<sub>6</sub>D<sub>4</sub>O<sub>4</sub>  
Molecular weight: 198 g/mol  
Concentration: ≤ 100 %  
CAS registry number: Dimethyl terephthalate-2,3,5,6-d<sub>4</sub>: 74079-01-9

## 4. FIRST AID MEASURES

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration.  
In case of skin contact: Wash off with soap and plenty of water.  
In case of eye contact: Flush eyes with water as a precaution.  
If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water.

## 5. FIRE-FIGHTING MEASURES

Conditions of flammability: Combustible at high temperature.

Special protective equipment for firefighters:	Wear self-contained breathing apparatus for firefighting if necessary.	
Hazardous combustion products:	Hazardous decomposition products formed under fire conditions: Carbon oxides.	
Explosion data:	Sensitivity to mechanical impact:	no data available
	Sensitivity to static discharge:	no data available
Further information:	No data available	

## 6. ACCIDENTAL RELEASE MEASURES

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Personal precautions:	Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Avoid breathing vapours, mist or gas.	
Environmental precautions:	Do not let product enter drains.	
Methods and materials for containment and cleaning up:	Keep in suitable, closed containers for disposal.	

## 7. HANDLING AND STORAGE

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Precautions for safe handling:	Normal measures for preventive fire protection. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation.
Conditions for safe storage:	Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Non combustible liquids.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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Appropriate engineering controls:	General industrial hygiene practice. Use mechanical exhaust or laboratory fumehood to avoid exposure
Personal protective equipment:	
• Eye/face protection:	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
• Skin protection:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
• Body protection:	Use impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
• Respiratory protection:	Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US).

- Control of environmental exposure: Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance:	Form:	Solid
	Colour:	White to off-white
Safety data:	pH:	no data available
	Melting point:	139–141 °C (292–286 °F), lit.
	Boiling point:	288 °C (550 °F), lit.
	Flash point:	151 °C (304 °F)
	Ignition temperature:	no data available
	Auto-ignition temperature:	520 °C (968 °F)
	Lower explosion limit:	0.8 Vol%
	Upper explosion limit:	11.8 Vol%
	Vapour pressure:	0.013 hPa (0.01 mmHg) at 25 °C (77 °F)
	Density:	5.5 (Air = 1)
	Water solubility:	19 mg/L
	Partition coefficient: n-octanol/water:	log Pow: 2.25
	Relative vapour density:	no data available
	Odour:	no data available
	Odour threshold:	no data available
	Evaporation rate:	no data available

## 10. STABILITY AND REACTIVITY

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Chemical stability:	Stable under recommended storage conditions.
Radioactivity:	Stable isotope compound. Not radioactive.
Reactivity:	no data available
Possibility of hazardous reactions:	no data available
Conditions to avoid:	no data available
Incompatible materials:	Strong oxidizing agents, Strong acids, Strong bases, Nitrates.
Hazardous decomposition products:	Hazardous decomposition products formed under fire conditions: Carbon oxides. Other decomposition products: no data available.

## 11. TOXICOLOGICAL INFORMATION

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Acute toxicity:	Oral LD50:	no data available
	Inhalation LC50:	no data available

	Dermal LD50:	no data available
	Other information on acute toxicity:	no data available
Skin corrosion/irritation:	no data available	
Serious eye damage/eye irritation:	no data available	
Respiratory or skin sensitization:	no data available	
Germ cell mutagenicity:	no data available	
Carcinogenicity:	<p>IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.</p> <p>ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.</p>	
Reproductive toxicity:	no data available	
Teratogenicity:	no data available	
Specific target organ toxicity:	Single exposure (GHS):	no data available
	Repeated exposure (GHS):	no data available
Aspiration hazard:	no data available	
Additional information:	RTECS:	WZ1225000
	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.	

## 12. ECOLOGICAL INFORMATION

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Toxicity:	no data available
Persistence and degradability:	no data available
Bioaccumulative potential:	no data available
Mobility in soil:	no data available
PBT and vPvB assessment:	no data available
Other adverse effects:	no data available

## 13. DISPOSAL CONSIDERATIONS

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Product:	Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging:	Dispose of as unused product.

## 14. TRANSPORT INFORMATION

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TDG (Canada):	Not dangerous goods.
IMDG:	Not dangerous goods.
IATA:	Not dangerous goods.

## **15. REGULATORY INFORMATION**

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This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

## **16. OTHER INFORMATION**

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Date of the latest revision: 16 September 2020

Further information: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Polymer Source, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.polymersource.ca](http://www.polymersource.ca) for additional terms and conditions of sale.